Please replace the paragraph beginning at page 11,line 15 with the following rewritten paragraph:

a13

Fig. 6 is a block diagram illustrating the five-stage Omega network of Fig. 4 with a related fixed Permutation P' which when applied after the P* permutation from the Omega network with Beta elements set to a default condition, results in the P permutation of the traditional DES .

IN THE CLAIMS:

Cancel claims 1-12, without prejudice or disclaimer.

Add new claims 13-31 as follows:

13. In a device for performing the Data Encryption Standard (DES) on a block of data bits under control of a DES key, the combination with a modified "P" permutation in the "f" function.

a14

14. The improved device of claim 13 including a second cipher key to specify said modified "P" permutation.

15. The improved device of claim 13 including logic gates for implementing said modified "P" permutation.

16. The improved device of claim 13 wherein said modified "P" permutation is selected by a control signal.

17. The improved cryptographic device of claim 16 wherein said control signal can be set so that the improved cryptographic device performs the DES.

18. The improved device of claim 16 wherein said control signal is a function of a subset of said DES key and the second cipher key.

a 14

19. The improved device of claim 18 wherein said function is time invariant.

20. The improved device of claim 18 wherein said function is time varying.

21. The improved cryptographic device of claim 15 wherein said logic gates comprise an Omega network.

22. The improved cryptographic device of claim 15 wherein said logic gates comprise a Benes-Waksman network.

23. The improved cryptographic device of claim 13 with a suspension control means to suspend operation of said improved cryptographic device and a cryptographic parameter storage means.

24. The improved cryptographic device of claim 13 including a derivation means to derive said DES key and a second cipher key from a master key.

25. In a device for performing the "f" function of the Data Encryption Standard (DES), the combination with a modified permutation means to produce a modified permutation replacing the fixed permutation "P" of the DES.

a 14

26. The improved device of claim 25 with said modified permutation means which produces a permutation equal to said fixed permutation "P".

27. A method for performing the Data Encryption Standard (DES) on a block of data bits under control of a DES key, in combination with a modified "P" permutation in the "f" function, comprising the step of:

replacing the "P" permutation in the "f" function by said modified permutation.

28. The method of claim 27 wherein the modified permutation is dependent upon a second cipher key.

29. The improved cryptographic method of claim 27 wherein said modified permutation can be selected so that said improved cryptographic method performs the DES.

30. The improved cryptographic method of claim 27 wherein said modified permutation is a function of a subset of said DES key and a second cipher key.

a14

31. The improved cryptographic method of claim 27 wherein operation of the improved method may be suspended and resumed according to a control means and comprising the steps of:

suspending operation of the improved cryptographic method by a control means;

storing in a storage means the cryptographic parameters and data so cipher operations can be resumed at the point of said suspended operation;

retrieving said cryptographic parameters and data upon signal from said control means;

entering said retrieved cryptographic parameters and data into appropriate cipher operation locations; and resuming operation of said improved cryptographic method at said point of said suspended operation upon signal from said control means.

a 14